

# Vaccine Uptake in Children in Wales

## COVER Annual report 2010

Data for the year ending 31<sup>st</sup> March 2010



### Key points

- Annual uptake of all routine immunisations in one year old children for Wales as a whole now exceed the 95% target and 17 of the 22 Local Authority areas have exceeded the 95% uptake target for the 5 in 1 immunisation in one year olds this year.
- Uptake of the first dose of MMR at 2 years has continued to increase and the annual uptake for 2009-10 was 92.0%
- Uptake of the second dose of MMR by 5 years of age increased to 85.8%, the highest ever annual uptake of MMR2 at five years of age.
- Uptake of pre-school 4 in 1 booster in five year old children has increased to 89.7%.
- Uptake of a complete three dose course of Human Papilloma Virus (HPV) vaccine in girls in the first year of the routine campaign (2008-9 School Year 8) was 85.3%.

### Findings

1. These results are for children living in Wales in May 2010 and reaching their first, second, fifth, 15<sup>th</sup> and 16<sup>th</sup> birthdays in the year ending March 31<sup>st</sup> 2010, and girls in school year 8 in 2008/2009.
2. Annual uptake of the completed course of '5 in 1'<sup>1</sup> vaccine, scheduled at 2, 3 and 4 months of age, in children reaching their first birthday was 96.0%. This is an increase of 0.3% on the previous annual uptake. Uptake ranged by Local Health Board (LHB) from 95.1% (Cardiff and Vale ULHB) to 97.2% (Cwm Taf LHB) and by Local Authority (LA) from 93.8% (Conwy) to 98.2% (Blaenau Gwent). Seventeen of the 22 LAs achieved the 95% target (Figures 1, 2, 4 and Tables 1, 2).
3. Annual uptake of a completed course of MenC<sup>2</sup> vaccine in children reaching their first birthday this year also increased, by 0.3% to 95.5%, ranging by LHB from 94.3% (Cardiff and Vale ULHB) to 97.1% (Cwm Taf LHB) and by LA from 93.8% (Cardiff, and Neath Port Talbot) to 98.2% (Blaenau Gwent) (Figure 1 and Tables 1, 2).
4. Uptake of a complete two dose primary course of pneumococcal conjugate vaccination (PCV<sup>3</sup>) in children at one year of age increased from 95.2% to 95.6%, ranging by LHB from 94.5% (Cardiff and Vale ULHB) to 97.3% (Cwm Taf LHB) and by LA from 94.0% (Cardiff) to 98.2% (Blaenau Gwent) (Figure 1 and Table 2).
5. Uptake of one dose of MMR<sup>4</sup> by two years of age increased by 3.8% to 92.0%. Uptake ranged by LHB from 90.4% (Powys LHB) to 93.8% (Cwm Taf LHB) and by LA from 89.6% (Conwy) to 94.4% (Blaenau Gwent). No LHB achieved the annual uptake of 95% for one dose of MMR by 2 years of age (Figures 1, 2 and 5 and Tables 1, 3), although uptake in 21 of the 22 LA areas exceeded 90%.
6. Annual uptake of the final dose of Pneumococcal Conjugate Vaccine (PCV<sup>3</sup>) at 2 years of age was 90.8%. These children would have been offered their final dose of PCV at around 13 months of age. Uptake by LHB ranged from 89.0% (Cardiff and Vale ULHB) to 92.9% (Cwm Taf LHB) and by LA from 87.8% (Cardiff) to 93.0% (Rhondda Cynon Taff) (Tables 1,3).
7. Annual uptake of the Hib/MenC booster scheduled at 12 months of age was 93.6%, ranging by LHB from 91.8% (Cardiff and Vale ULHB) to 95.7% (Cwm Taf LHB) and by LA from 91.1% (Cardiff, and Pembrokeshire) to 96.1% (Blaenau Gwent) (Tables 1, 3)
8. At five years of age annual uptake of two doses of MMR has increased by 3.7% to 85.8%. This is the highest ever annual uptake of MMR2 at five years of age (Figures 1, 3, 6,

<sup>1</sup> DTaP/IPV/Hib vaccine protects against diphtheria, tetanus, pertussis (Whooping Cough), polio and Hib infection.

<sup>2</sup> Men C vaccine protects against meningitis caused by meningococcus group C infection. Children reaching 1yr of age would have been offered one dose of MenC vaccine at 3 months of age and one dose at 4 months of age.

<sup>3</sup> PCV protects against pneumococcal meningitis, bacteraemia, pneumonia and otitis media. Children reaching 1yr of age would have been offered one dose of PCV at 2 months of age and one dose at 4 months of age. Children reaching 2yrs would have been offered their third and final PCV dose at around 13 months of age.

<sup>4</sup> MMR protects against measles, mumps and rubella infections.

<sup>5</sup> DTaP/IPV (and dTaP/IPV) vaccines boost protection against diphtheria, tetanus, pertussis and polio infection before school entry

<sup>6</sup> Td/IPV boosts protection against Diphtheria, Tetanus and Polio infection before entering adulthood

Tables 1, 4). Uptake of the second dose of MMR by five years of age ranged by LHB from 80.2% (Powys LHB) to 88.9% (Cwm Taf LHB) and by LA from 80.2% (Powys) to 90.8% (Wrexham). No LHB achieved the 95% target for this immunisation.

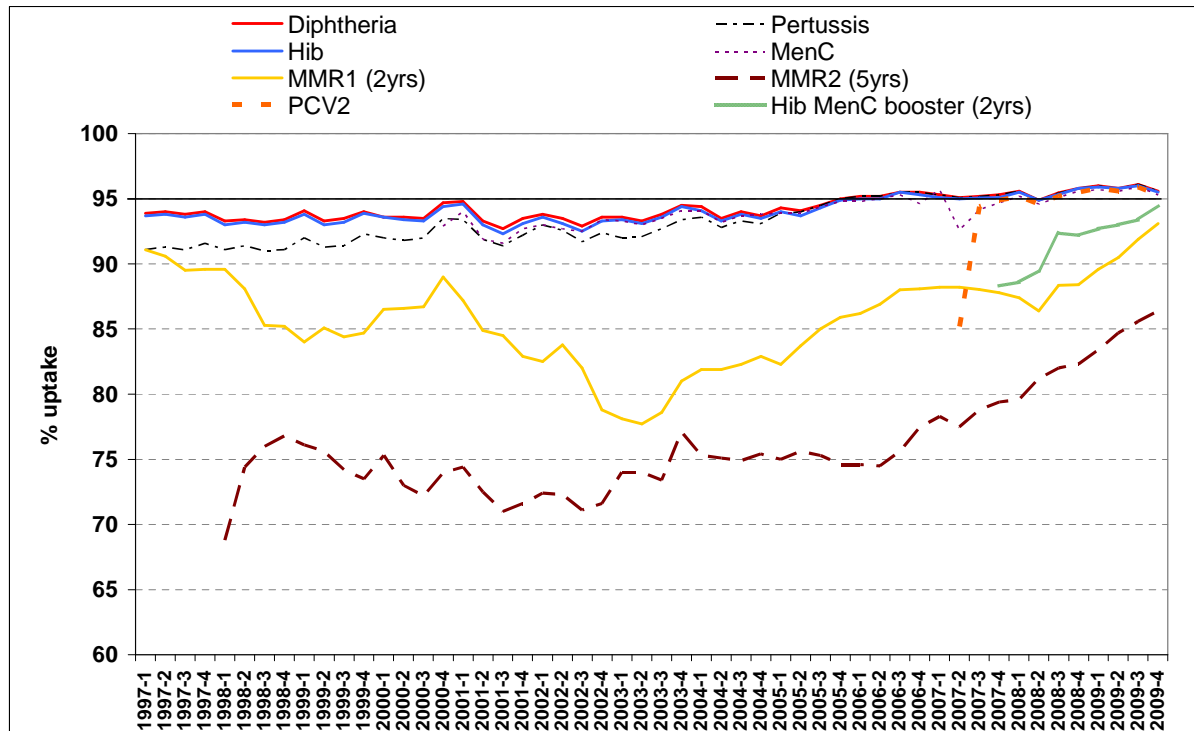
9. Uptake of the "4 in 1" DTaP/IPV<sup>5</sup> pre-school booster in children reaching their fifth birthday this year was 89.7%, ranging by LHB from 88.5% (ABM ULHB and Powys LHB) to 92.5% (Cwm Taf LHB) and by LA from 85.2% (Cardiff) to 93.9% (Ceredigion) (Figures 3, 7, Tables 1, 4).
10. Uptake of all three doses of HPV vaccine, routinely scheduled in School Year 8, in girls in the first full year of the routine campaign (reaching their 13<sup>th</sup> birthday between 01/09/08 and 31/08/09) was 85.3%, ranging by LHB from 80.2% (Cardiff and Vale ULHB) to 91.8% (Cwm Taf LHB) and by LA from 78.1% (Newport) to 93.1% (Blaenau Gwent) (Table 7). Immunisation sessions for the current (2009-10) School Year 8 are in progress and uptakes for one and two HPV doses in this group are reported in [COVER Report 94](#).
11. Current uptake of all three doses of HPV vaccine in the catch up campaign for girls born 01/09/90 and 31/08/91 stands at 30.2% (Table 7), ranging by LHB from 21.4% (Cwm Taf LHB) to 46.9% (Powys LHB) and by LA from 13.2% (Bridgend) to 58.6% (Carmarthenshire). Progress in the current catch up campaign for girls born 1<sup>st</sup> September 1991 and 31<sup>st</sup> August 1995 is reported in [COVER Report 94](#).
12. At 15 years of age annual coverage of two doses of MMR was 82.0% (Table 5), ranging by LHB from 79.3% (Hywel Dda LHB and Powys LHB) to 87.1% (Cwm Taf LHB) and by LA from 73.7% (Monmouthshire) to 88.2% (Torfaen). Coverage of one dose of MMR in 15 year olds was 91.2%, ranging by LHB from 89.4% (Cardiff and Vale ULHB) to 94.4% (Cwm Taf LHB) and by LA from 84.3% (Monmouthshire) to 95.6% (Wrexham). A breakdown by sex indicates that 82.1% of girls had received a full (2 MMR doses) course of immunisation against rubella this year and coverage of only 1 dose was 90.8%.
13. At 16 years of age annual coverage of two doses of MMR was 84.2% (Tables 1, 6), ranging by LHB from 81.9% (Aneurin Bevan LHB) to 89.2% (Cwm Taf LHB) and by LA from 70.0% (Monmouthshire) to 91.0% (Wrexham). Annual coverage of one dose of MMR in 16 year olds was 92.5%, ranging by LA from 84.0% (Monmouthshire) to 96.1% (Flintshire). A breakdown by sex indicates that 84.4% of girls had received a full (2 MMR doses) course of immunisation against rubella this year and coverage of only 1 dose was 92.4%.
14. National uptake of the Td/IPV<sup>6</sup> teenage booster in children reaching 16 years of age in the year ending 31<sup>st</sup> March 2010 was 61.1% (Tables 1, 6), ranging by LHB from 16.7% (Aneurin Bevan LHB) to 79.1% (Powys LHB) and by LA from 5.3% (Blaenau Gwent) to 81.1% (Merthyr Tydfil).

## Comment

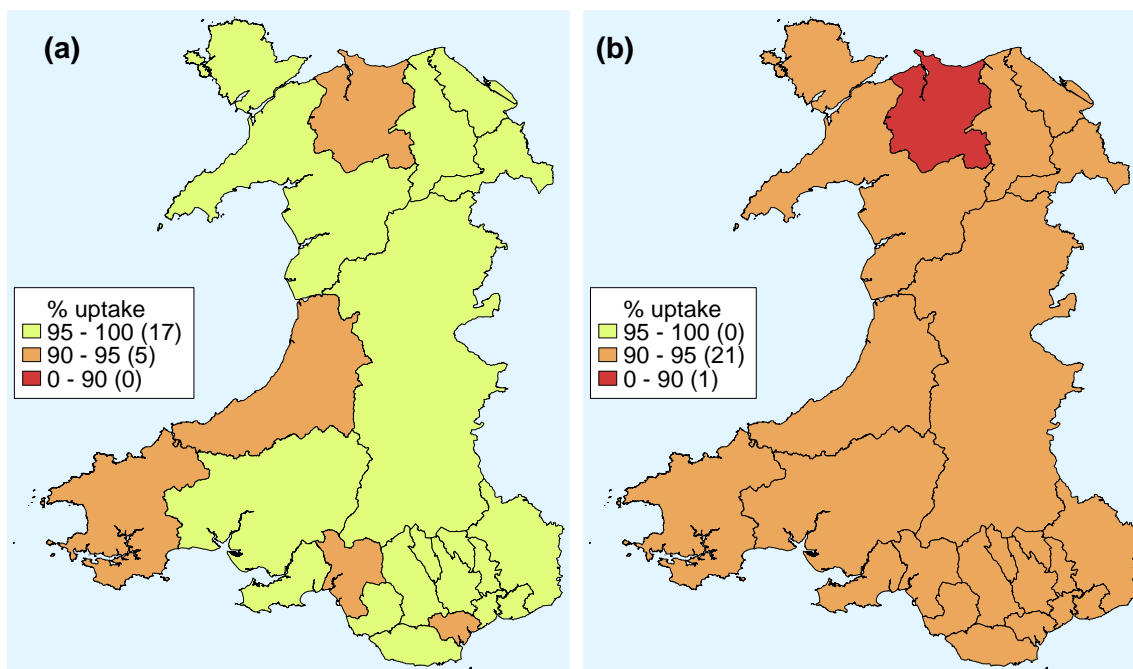
Trends in annual immunisation uptake continue to be positive. Uptake of a complete course of the 5 in 1 immunisation in one year old babies again exceeds the 95% target in 17 of the 22 local authority areas. Uptake of one dose of MMR in two year olds continues to show year on year improvement and now exceeds 90%. At Local Authority level MMR uptake in two year olds has increased this year in all areas of Wales. Annual uptake of a completed course (two doses) of MMR by five years of age continues to improve and is approaching 90%, and again uptake has increased in all LA areas. Although routine uptake of MMR is increasing there are still considerable numbers of children in Wales, currently in school, who have not started or not completed the full two dose course required to protect them from measles, mumps and rubella. The largest outbreak of measles in Wales in recent years occurred in 2009, with 159 laboratory confirmed cases and many more probable cases. Follow up of children who have missed one or both scheduled MMR doses is vital in reducing measles transmission in Wales and averting future outbreaks. Guidance on routine follow up procedures, including MMR status checks at primary and comprehensive school entry, which should now be normal practice in LHBs, can be found in [WHC\(2005\)081](#). Uptake of HPV in the first year of the routine campaign was encouraging, although uptake in girls in the older catch up group (born 01/09/1990 – 31/08/1991) was notably lower. It is important that girls who have missed out routine or catch up doses of HPV are offered immunisation through schools programmes or primary care as appropriate.

**Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre.** Data for this report was provided by Health Solutions Wales from the National Community Child Health Database (NCCHD). The data was sourced from Community Child Health databases maintained by local Child Health Office staff in Trusts throughout Wales based on regular returns from doctors and nurses who immunise or advise on immunisation. Uptake data presented throughout are for LHB resident population, not for LHB GP practice populations. The maps, graphs and Table 1 are best viewed in colour.

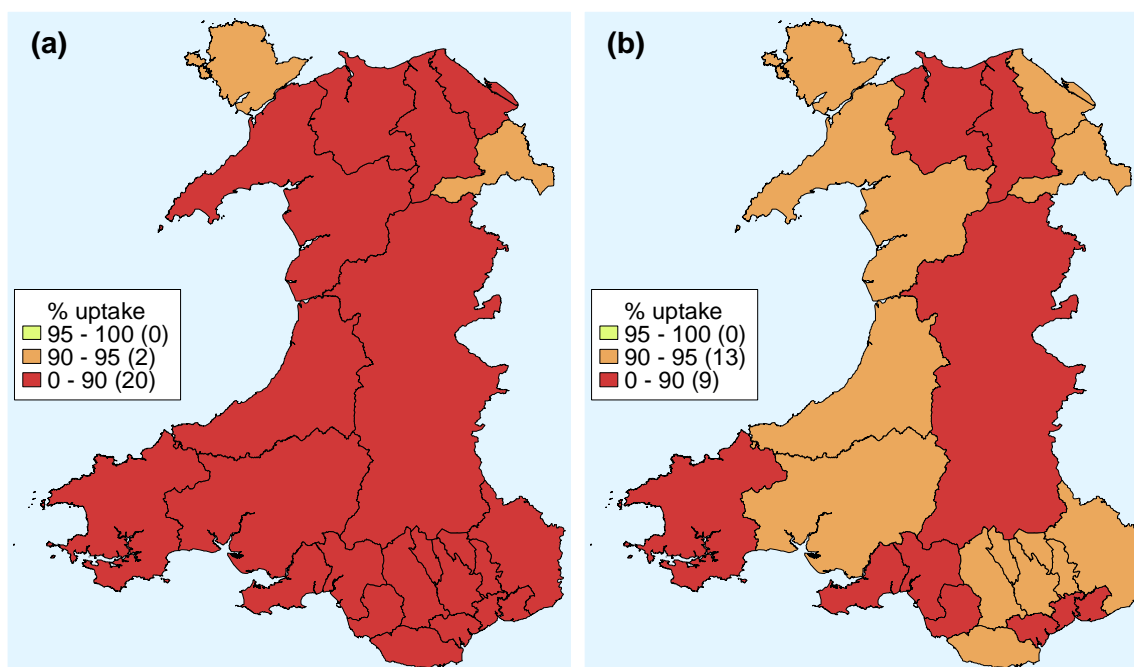
**Figure 1.** Percentage uptake of childhood immunisations in Wales, quarter 4 1990 to quarter 4 2009. Data are for: children reaching 1 year of age each quarter for diphtheria, pertussis, Hib and pneumococcal conjugate vaccine, children reaching 2 years of age for MMR1 (first dose), and 5 years of age for MMR2 (second dose).



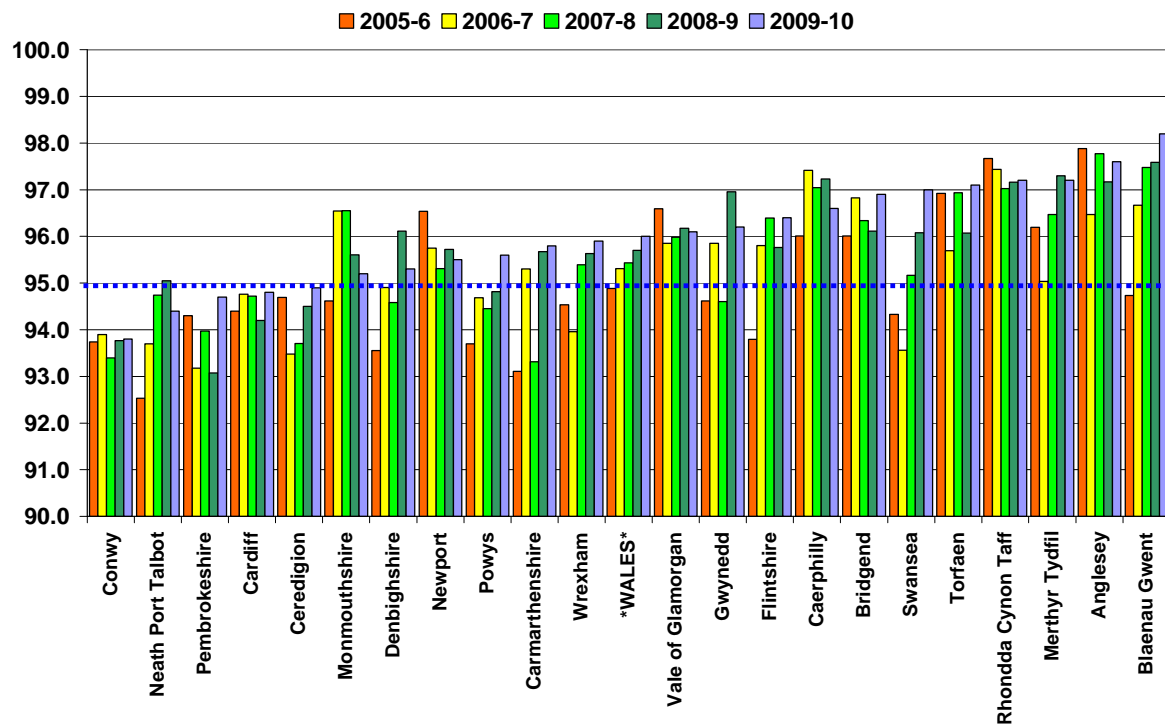
**Figure 2. (a)** Uptake of 5 in 1 vaccine in Welsh Local Authority areas in children reaching their 1<sup>st</sup> birthday between 01/04/09 and 31/03/10. **(b)** Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2<sup>nd</sup> birthday between 01/04/09 and 31/03/10



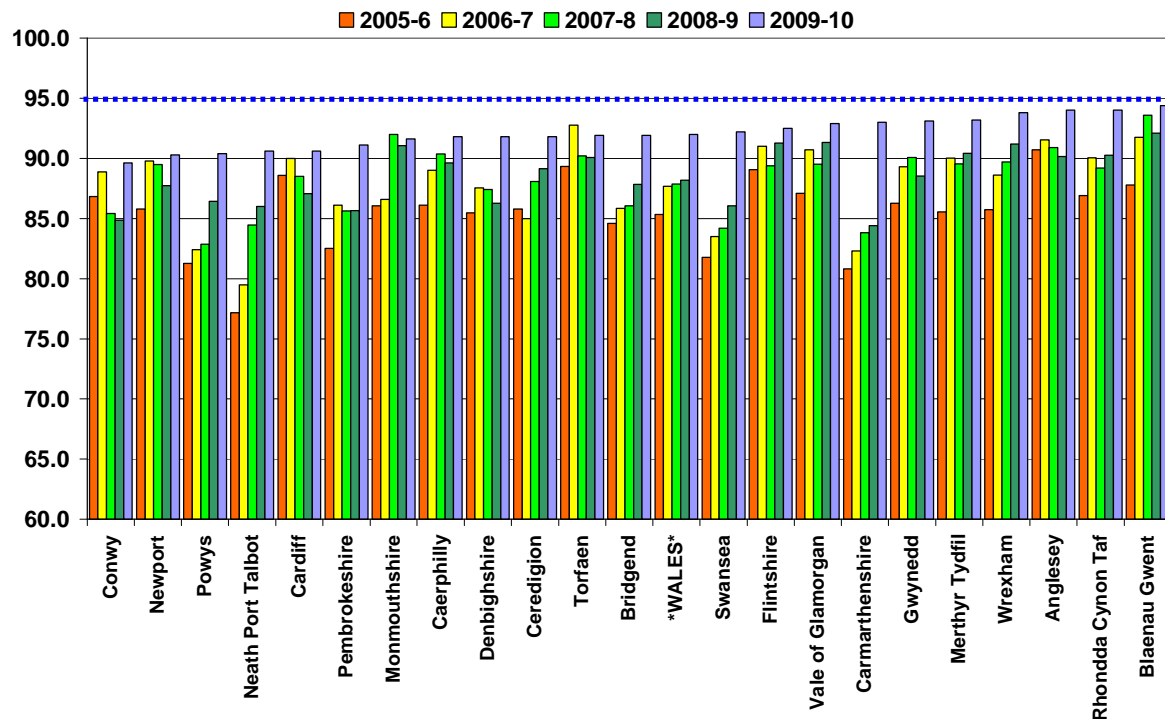
**Figure 3. (a)** Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5<sup>th</sup> birthday between 01/04/09 and 31/03/10. **(b)** Uptake of 4 in 1 vaccine in Welsh Local Authority areas in children reaching their 5<sup>th</sup> birthday between 01/04/09 and 31/03/10.



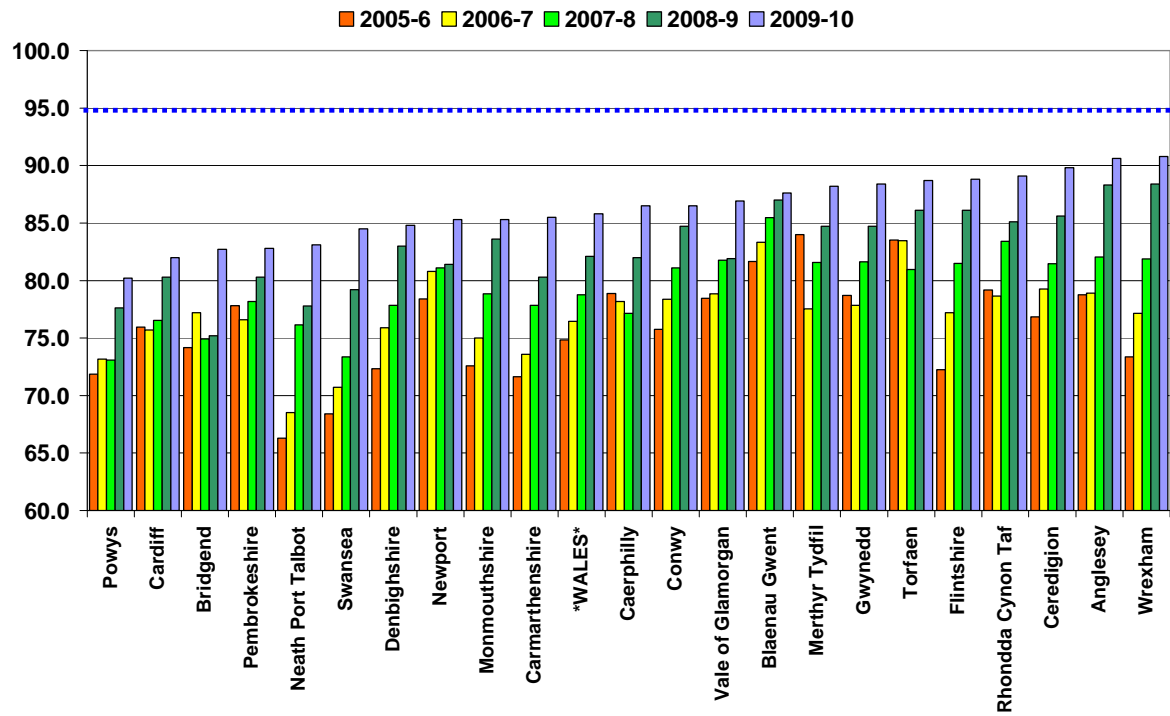
**Figure 4.** Annual uptake of 5 in 1 vaccine by 1 year of age (2005 – 2010 financial years, ranked by uptake in 2009-2010).



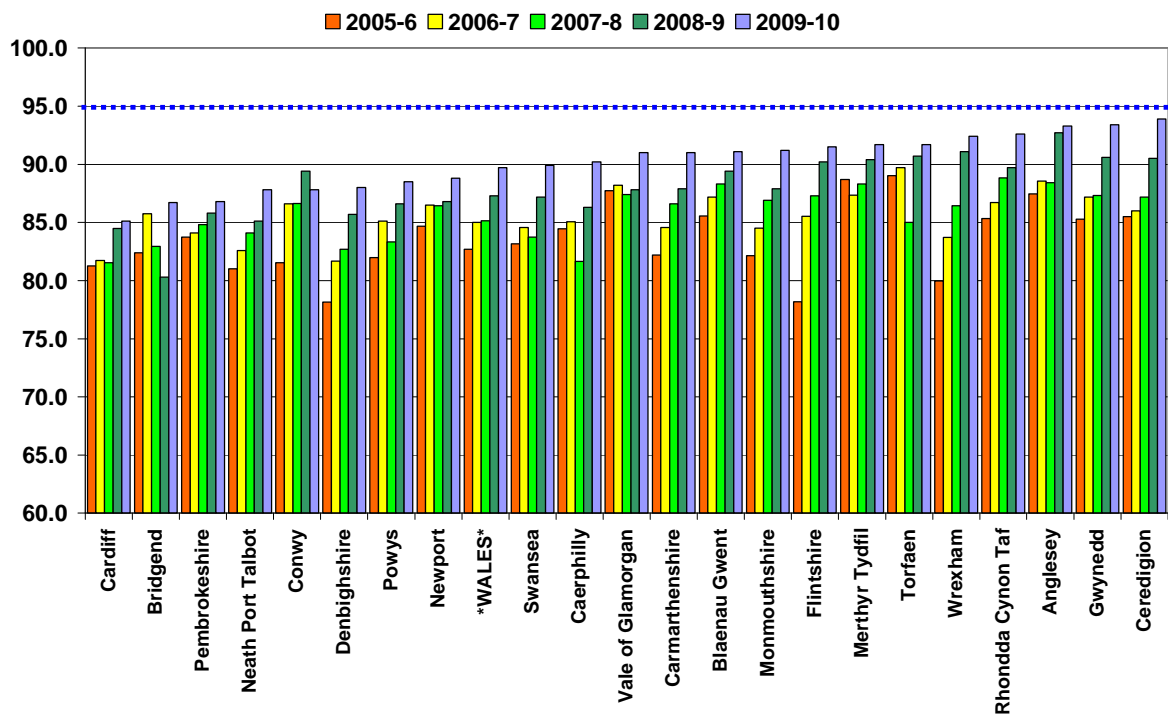
**Figure 5.** Annual uptake of 1 dose of MMR by 2 years of age (2005 – 2010 financial years, ranked by uptake in 2009-2010).



**Figure 6.** Annual uptake of 2 doses of MMR by 5 years of age (2005 – 2010 financial years, ranked by uptake in 2009-2010).



**Figure 7.** Annual uptake of the 4 in 1 pre-school booster by 5 years of age (2005 – 2010 financial years, ranked by uptake in 2009-2010).





**Table1.** Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 5th and 15th birthday between 01/04/09 and 31/03/10.

Area	Age 1 year					Age 2 years						Age 5 years				Age 16 years								
	Resident children	5 in 1*		MenC		Resident children	MMR1		PCV‡		Hib/MenC booster		Resident children	MMR2		4 in 1†		Resident children	MMR1		MMR2		3 in 1 Teenage booster**	
	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)
<b>Abertawe Bro Morgannwg University LHB</b>																								
Bridgend LA	1550	1502	96.9	1499	96.7		1447	91.9	1442	91.6	1485	94.3	1457	1205	82.7	1263	86.7	1559	1437	92.2	1296	83.1	1187	76.1
Neath Port Talbot LA	1509	1424	94.4	1415	93.8	1552	1406	90.6	1403	90.4	1447	93.2	1517	1281	83.1	1332	87.8	1751	1656	94.6	1533	87.5	1382	77.8
Swansea LA	2687	2606	97.0	2583	96.1	2701	2491	92.2	2458	91.0	2542	94.1	2444	2088	84.5	2198	89.9	2700	2541	94.1	2288	84.7	2162	80.1
<b>Health Board Total</b>	<b>5746</b>	<b>5532</b>	<b>96.3</b>	<b>5497</b>	<b>95.7</b>	<b>5827</b>	<b>5344</b>	<b>91.7</b>	<b>5303</b>	<b>91.0</b>	<b>5474</b>	<b>93.9</b>	<b>5418</b>	<b>4532</b>	<b>83.6</b>	<b>4793</b>	<b>88.5</b>	<b>6010</b>	<b>5634</b>	<b>93.7</b>	<b>5117</b>	<b>85.1</b>	<b>4711</b>	<b>78.4</b>
<b>Aneurin Bevan LHB</b>																								
Blaenau Gwent LA	811	796	98.2	796	98.2	763	720	94.4	707	92.7	733	96.1	734	643	87.6	689	91.1	955	916	95.9	853	89.3	51	5.3
Caerphilly LA	2097	2025	96.6	2020	96.3	2075	1905	91.8	1892	91.2	1971	95.0	1975	1709	86.5	1781	90.2	2229	2076	93.1	1851	83.0	197	8.8
Monmouthshire LA	872	830	95.2	829	95.1	841	770	91.6	773	91.9	793	94.3	812	778	85.3	832	91.2	1186	996	84.0	830	70.0	498	42.0
Newport LA	1969	1881	95.5	1874	95.2	1867	1686	90.3	1670	89.4	1738	93.1	1771	1511	85.3	1572	88.8	1984	1810	91.2	1607	81.0	338	17.0
Torfaen LA	1086	1054	97.1	1053	97.0	1056	970	91.9	951	90.1	993	94.0	1066	946	88.7	978	91.7	1292	1229	95.1	1120	86.7	190	14.7
<b>Health Board Total</b>	<b>6835</b>	<b>6586</b>	<b>96.4</b>	<b>6572</b>	<b>96.2</b>	<b>6602</b>	<b>6051</b>	<b>91.7</b>	<b>5993</b>	<b>90.8</b>	<b>6228</b>	<b>94.3</b>	<b>6458</b>	<b>5587</b>	<b>86.5</b>	<b>5832</b>	<b>90.3</b>	<b>7646</b>	<b>7027</b>	<b>91.9</b>	<b>6261</b>	<b>81.9</b>	<b>1274</b>	<b>16.7</b>
<b>Betsi Cadwaladr University LHB</b>																								
Anglesey LA	744	726	97.6	725	97.4	745	700	94.0	691	92.8	710	95.3	671	608	90.6	626	93.3	842	795	94.4	738	87.6	608	72.2
Conwy LA	1168	1096	93.8	1097	93.9	1089	976	89.6	973	89.3	999	91.7	1045	904	86.5	918	87.8	1312	1215	92.6	1085	82.7	1039	79.2
Denbighshire LA	1009	962	95.3	959	95.0	1068	980	91.8	953	89.2	987	92.4	961	815	84.8	846	88.0	1214	1126	92.8	1021	84.1	957	78.8
Flintshire LA	1685	1624	96.4	1615	95.8	1804	1689	92.5	1634	90.6	1675	92.8	1743	1548	88.8	1595	91.5	1860	1787	96.1	1661	89.3	1388	74.6
Gwynedd LA	1235	1188	96.2	1175	95.1	1223	1139	93.1	1135	92.8	1168	95.3	1202	1083	88.4	1123	93.4	1378	1309	95.0	1247	90.5	1049	76.1
Wrexham LA	1718	1647	95.9	1639	95.4	1640	1538	93.8	1507	91.9	1535	93.6	1533	1392	90.8	1416	92.4	1470	1413	96.1	1338	91.0	1190	81.0
<b>Health Board Total</b>	<b>7559</b>	<b>7243</b>	<b>95.8</b>	<b>7210</b>	<b>95.4</b>	<b>7569</b>	<b>7002</b>	<b>92.5</b>	<b>6893</b>	<b>91.1</b>	<b>7072</b>	<b>93.4</b>	<b>7155</b>	<b>6330</b>	<b>88.5</b>	<b>6524</b>	<b>91.2</b>	<b>8076</b>	<b>7645</b>	<b>94.7</b>	<b>7090</b>	<b>87.8</b>	<b>6231</b>	<b>77.2</b>
<b>Cardiff and Vale University LHB</b>																								
Cardiff LA	4565	4329	94.8	4284	93.8	4439	4021	90.6	3897	87.8	4043	91.1	3835	3143	82.0	3266	85.2	4268	3848	90.2	3500	82.0	2769	64.9
Vale of Glamorgan LA	1481	1423	96.1	1418	95.7	1513	1405	92.9	1399	92.5	1423	94.1	1367	1188	86.9	1244	91.0	1734	1603	92.4	1476	85.1	1287	74.2
<b>Health Board Total</b>	<b>6046</b>	<b>5752</b>	<b>95.1</b>	<b>5702</b>	<b>94.3</b>	<b>5952</b>	<b>5426</b>	<b>91.2</b>	<b>5296</b>	<b>89.0</b>	<b>5466</b>	<b>91.8</b>	<b>5202</b>	<b>4331</b>	<b>83.3</b>	<b>4510</b>	<b>86.7</b>	<b>6002</b>	<b>5451</b>	<b>90.8</b>	<b>4976</b>	<b>82.9</b>	<b>4056</b>	<b>67.6</b>
<b>Cwm Taf LHB</b>																								
Merthyr Tydfil LA	721	701	97.2	700	97.1	693	646	93.2	642	92.6	659	95.1	654	577	88.2	600	91.7	783	737	94.1	699	89.3	635	81.1
Rhondda Cynon Taff LA	2848	2767	97.2	2767	97.2	2759	2593	94.0	2565	93.0	2643	95.8	2633	2346	89.1	2439	92.6	2825	2703	95.7	2518	89.1	2167	76.7
<b>Health Board Total</b>	<b>3569</b>	<b>3468</b>	<b>97.2</b>	<b>3467</b>	<b>97.1</b>	<b>3452</b>	<b>3239</b>	<b>93.8</b>	<b>3207</b>	<b>92.9</b>	<b>3302</b>	<b>95.7</b>	<b>3287</b>	<b>2923</b>	<b>88.9</b>	<b>3039</b>	<b>92.5</b>	<b>3608</b>	<b>3440</b>	<b>95.3</b>	<b>3217</b>	<b>89.2</b>	<b>2802</b>	<b>77.7</b>
<b>Hywel Dda LHB</b>																								
Carmarthenshire LA	1901	1821	95.8	1811	95.3	1977	1838	93.0	1800	91.0	1854	93.8	1806	1545	85.5	1644	91.0	2040	1856	91.0	1659	81.3	1492	73.1
Ceredigion LA	605	574	94.9	568	93.9	658	604	91.8	609	92.6	618	93.6	618	555	89.8	580	93.9	756	708	93.7	650	86.0	587	77.6
Pembrokeshire LA	1232	1187	94.7	1165	94.6	1285	1171	91.1	1142	88.9	1170	91.1	1216	1007	82.8	1055	86.8	1521	1384	91.0	1245	81.9	419	27.5
<b>Health Board Total</b>	<b>3738</b>	<b>3562</b>	<b>95.3</b>	<b>3544</b>	<b>94.8</b>	<b>3920</b>	<b>3613</b>	<b>92.2</b>	<b>3551</b>	<b>90.6</b>	<b>3640</b>	<b>92.9</b>	<b>3640</b>	<b>3107</b>	<b>85.4</b>	<b>3279</b>	<b>90.1</b>	<b>4317</b>	<b>3948</b>	<b>91.5</b>	<b>3554</b>	<b>82.3</b>	<b>2498</b>	<b>57.9</b>
<b>Powys Teaching LHB</b>	<b>1241</b>	<b>1186</b>	<b>95.6</b>	<b>1181</b>	<b>95.2</b>	<b>1263</b>	<b>1142</b>	<b>90.4</b>	<b>1151</b>	<b>91.1</b>	<b>1182</b>	<b>93.6</b>	<b>1266</b>	<b>1015</b>	<b>80.2</b>	<b>1121</b>	<b>88.5</b>	<b>1603</b>	<b>1468</b>	<b>91.6</b>	<b>1323</b>	<b>82.5</b>	<b>1268</b>	<b>79.1</b>
Unknown	266	254	95.5	250	94.0	239	219	91.6	219	91.6	225	94.1	201	162	80.6	171	85.1	444	283	63.7	229	51.6	199	44.8
<b>Wales Total</b>	<b>35000</b>	<b>33583</b>	<b>96.0</b>	<b>33423</b>	<b>95.5</b>	<b>34824</b>	<b>32036</b>	<b>92.0</b>	<b>31613</b>	<b>90.8</b>	<b>32589</b>	<b>93.6</b>	<b>32627</b>	<b>27987</b>	<b>85.8</b>	<b>29269</b>	<b>89.7</b>	<b>37706</b>	<b>34896</b>	<b>92.5</b>	<b>31767</b>	<b>84.2</b>	<b>23039</b>	<b>61.1</b>

\* Update of pertussis used as proxy

\*\* Uptake of diphtheria (reinforcing booster dose) used as proxy

‡ Children receiving the final (booster) dose of PCV

**Table 2.** Vaccine uptake in children reaching their 1st birthday between 01/04/09 and 31/03/10 and resident on 01/05/2010

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC	PCV2*	Hib/MenC
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
<b><u>Abertawe Bro Morgannwg University LHB</u></b>										
Bridgend LA	1550	1502 96.9	1502 96.9	1502 96.9	1501 96.8	1498 96.6	1 0.1	1499 96.7	1490 96.1	133 8.6
Neath Port Talbot LA	1509	1424 94.4	1424 94.4	1424 94.4	1421 94.2	1422 94.2	2 0.1	1415 93.8	1423 94.3	98 6.5
Swansea LA	2687	2606 97.0	2606 97.0	2606 97.0	2604 96.9	2600 96.8	6 0.2	2583 96.1	2589 96.4	134 5.0
<b>Health Board Total</b>	<b>5746</b>	<b>5532 96.3</b>	<b>5532 96.3</b>	<b>5532 96.3</b>	<b>5526 96.2</b>	<b>5520 96.1</b>	<b>9 0.2</b>	<b>5497 95.7</b>	<b>5502 95.8</b>	<b>365 6.4</b>
<b><u>Aneurin Bevan LHB</u></b>										
Blaenau Gwent LA	811	796 98.2	796 98.2	796 98.2	796 98.2	796 98.2	0 0.0	796 98.2	796 98.2	50 6.2
Caerphilly LA	2097	2025 96.6	2025 96.6	2025 96.6	2025 96.6	2025 96.6	3 0.1	2020 96.3	2022 96.4	102 4.9
Monmouthshire LA	872	830 95.2	830 95.2	830 95.2	830 95.2	830 95.2	1 0.1	829 95.1	827 94.8	40 4.6
Newport LA	1969	1882 95.6	1882 95.6	1881 95.5	1881 95.5	1880 95.5	2 0.1	1874 95.2	1876 95.3	115 5.8
Torfaen LA	1086	1054 97.1	1054 97.1	1054 97.1	1054 97.1	1054 97.1	4 0.4	1053 97	1049 96.6	70 6.4
<b>Health Board Total</b>	<b>6835</b>	<b>6587 96.4</b>	<b>6587 96.4</b>	<b>6586 96.4</b>	<b>6586 96.4</b>	<b>6585 96.3</b>	<b>10 0.1</b>	<b>6572 96.2</b>	<b>6570 96.1</b>	<b>377 5.5</b>
<b><u>Betsi Cadwaladr University LHB</u></b>										
Anglesey LA	744	726 97.6	726 97.6	726 97.6	726 97.6	726 97.6	0 0.0	725 97.4	727 97.7	29 3.9
Conwy LA	1168	1096 93.8	1096 93.8	1096 93.8	1096 93.8	1096 93.8	3 0.3	1097 93.9	1103 94.4	57 4.9
Denbighshire LA	1009	962 95.3	962 95.3	962 95.3	962 95.3	962 95.3	4 0.4	959 95	961 95.2	34 3.4
Flintshire LA	1685	1624 96.4	1624 96.4	1624 96.4	1624 96.4	1623 96.3	2 0.1	1615 95.8	1618 96.0	50 3.0
Gwynedd LA	1235	1188 96.2	1188 96.2	1188 96.2	1188 96.2	1187 96.1	10 0.8	1175 95.1	1178 95.4	55 4.5
Wrexham LA	1718	1647 95.9	1647 95.9	1647 95.9	1646 95.8	1646 95.8	6 0.3	1639 95.4	1640 95.5	117 6.8
<b>Health Board Total</b>	<b>7559</b>	<b>7243 95.8</b>	<b>7243 95.8</b>	<b>7243 95.8</b>	<b>7242 95.8</b>	<b>7240 95.8</b>	<b>25 0.3</b>	<b>7210 95.4</b>	<b>7227 95.6</b>	<b>342 4.5</b>
<b><u>Cardiff and Vale University LHB</u></b>										
Cardiff LA	4565	4329 94.8	4329 94.8	4329 94.8	4328 94.8	4325 94.7	11 0.2	4284 93.8	4292 94.0	205 4.5
Vale of Glamorgan LA	1481	1423 96.1	1423 96.1	1423 96.1	1422 96.0	1421 95.9	1 0.1	1418 95.7	1419 95.8	82 5.5
<b>Health Board Total</b>	<b>6046</b>	<b>5752 95.1</b>	<b>5752 95.1</b>	<b>5752 95.1</b>	<b>5750 95.1</b>	<b>5746 95.0</b>	<b>12 0.2</b>	<b>5702 94.3</b>	<b>5711 94.5</b>	<b>287 4.7</b>
<b><u>Cwm Taf LHB</u></b>										
Merthyr Tydfil LA	721	701 97.2	701 97.2	701 97.2	701 97.2	701 97.2	2 0.3	700 97.1	700 97.1	17 2.4
Rhondda Cynon Taff LA	2848	2768 97.2	2768 97.2	2767 97.2	2768 97.2	2766 97.1	2 0.1	2767 97.2	2772 97.3	143 5.0
<b>Health Board Total</b>	<b>3569</b>	<b>3469 97.2</b>	<b>3469 97.2</b>	<b>3468 97.2</b>	<b>3469 97.2</b>	<b>3467 97.1</b>	<b>4 0.1</b>	<b>3467 97.1</b>	<b>3472 97.3</b>	<b>160 4.5</b>
<b><u>Hywel Dda LHB</u></b>										
Cardiff LA	1901	1821 95.8	1821 95.8	1821 95.8	1821 95.8	1821 95.8	17 0.9	1811 95.3	1811 95.3	92 4.8
Ceredigion LA	605	574 94.9	574 94.9	574 94.9	574 94.9	574 94.9	0 0.0	568 93.9	570 94.2	38 6.3
Pembrokeshire LA	1232	1167 94.7	1167 94.7	1167 94.7	1167 94.7	1165 94.6	19 1.5	1165 94.6	1167 94.7	77 6.3
<b>Health Board Total</b>	<b>3738</b>	<b>3562 95.3</b>	<b>3562 95.3</b>	<b>3562 95.3</b>	<b>3562 95.3</b>	<b>3560 95.2</b>	<b>36 1.0</b>	<b>3544 94.8</b>	<b>3548 94.9</b>	<b>207 5.5</b>
<b><u>Powys Teaching LHB</u></b>										
Unknown	1241	1186 95.6	1186 95.6	1186 95.6	1185 95.5	1184 95.4	3 0.2	1181 95.2	1181 95.2	68 5.5
Unknown	266	254 95.5	254 95.5	254 95.5	254 95.5	254 95.5	2 0.8	250 94	252 94.7	15 5.6
<b>Wales Total</b>	<b>35000</b>	<b>33585 96.0</b>	<b>33585 96.0</b>	<b>33583 96.0</b>	<b>33574 95.9</b>	<b>33556 95.9</b>	<b>101 0.3</b>	<b>33423 95.5</b>	<b>33463 95.6</b>	<b>1821 5.2</b>

\* Full primary 2 dose course of pneumococcal conjugate vaccine



**Table 3.** Vaccine uptake in children reaching their 2nd birthday between 01/04/09 and 31/03/10 and resident on 01/05/2010.

Area	Resident children (n)	D3		T3		P3		Po3		Hib3		MMR1		MenC*		PCV2**		PCV3***		Hib/MenC	
		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<b><u>Abertawe Bro Morgannwg University LHB</u></b>																					
Bridgend LA		1542	98.0	1542	98.0	1541	97.9	1539	97.8	1541	97.9	1447	91.9	1537	97.6	1531	97.3	1442	91.6	1485	94.3
Neath Port Talbot LA	1552	1499	96.6	1499	96.6	1499	96.6	1498	96.5	1497	96.5	1406	90.6	1484	95.6	1481	95.4	1403	90.4	1447	93.2
Swansea LA	2701	2633	97.5	2633	97.5	2633	97.5	2634	97.5	2624	97.1	2491	92.2	2585	95.7	2591	95.9	2458	91.0	2542	94.1
<b>Health Board Total</b>	5827	5674	97.4	5674	97.4	5673	97.4	5671	97.3	5662	97.2	5344	91.7	5606	96.2	5603	96.2	5303	91.0	5474	93.9
<b><u>Aneurin Bevan LHB</u></b>																					
Blaenau Gwent LA	763	752	98.6	752	98.6	752	98.6	752	98.6	752	98.6	720	94.4	751	98.4	749	98.2	707	92.7	733	96.1
Caerphilly LA	2075	2035	98.1	2035	98.1	2035	98.1	2035	98.1	2035	98.1	1905	91.8	2027	97.7	2029	97.8	1892	91.2	1971	95.0
Monmouthshire LA	841	814	96.8	814	96.8	814	96.8	814	96.8	814	96.8	770	91.6	805	95.7	804	95.6	773	91.9	793	94.3
Newport LA	1867	1813	97.1	1813	97.1	1813	97.1	1809	96.9	1805	96.7	1686	90.3	1788	95.8	1792	96.0	1670	89.4	1738	93.1
Torfaen LA	1056	1030	97.5	1030	97.5	1030	97.5	1030	97.5	1029	97.4	970	91.9	1018	96.4	1020	96.6	951	90.1	993	94.0
<b>Health Board Total</b>	6602	6444	97.6	6444	97.6	6444	97.6	6440	97.5	6435	97.5	6051	91.7	6389	96.8	6394	96.8	5993	90.8	6228	94.3
<b><u>Betsi Cadwaladr University LHB</u></b>																					
Anglesey LA	745	725	97.3	725	97.3	725	97.3	725	97.3	725	97.3	700	94.0	724	97.2	723	97.0	691	92.8	710	95.3
Conwy LA	1089	1048	96.2	1048	96.2	1048	96.2	1047	96.1	1045	96.0	976	89.6	1029	94.5	1037	95.2	973	89.3	999	91.7
Denbighshire LA	1068	1041	97.5	1041	97.5	1041	97.5	1039	97.3	1039	97.3	980	91.8	1026	96.1	1025	96.0	953	89.2	987	92.4
Flintshire LA	1804	1757	97.4	1757	97.4	1757	97.4	1756	97.3	1755	97.3	1669	92.5	1738	96.3	1742	96.6	1634	90.6	1675	92.8
Gwynedd LA	1223	1194	97.6	1193	97.5	1194	97.6	1192	97.5	1190	97.3	1139	93.1	1176	96.2	1169	95.6	1135	92.8	1166	95.3
Wrexham LA	1640	1597	97.4	1597	97.4	1596	97.3	1593	97.1	1594	97.2	1538	93.8	1570	95.7	1571	95.8	1507	91.9	1535	93.6
<b>Health Board Total</b>	7569	7362	97.3	7361	97.3	7361	97.3	7352	97.1	7348	97.1	7002	92.5	7263	96.0	7267	96.0	6893	91.1	7072	93.4
<b><u>Cardiff and Vale University LHB</u></b>																					
Cardiff LA	4439	4284	96.5	4284	96.5	4283	96.5	4281	96.4	4270	96.2	4021	90.6	4152	93.5	4167	93.9	3897	87.8	4043	91.1
Vale of Glamorgan LA	1513	1484	98.1	1484	98.1	1484	98.1	1483	98.0	1481	97.9	1405	92.9	1468	97.0	1470	97.2	1399	92.5	1423	94.1
<b>Health Board Total</b>	5952	5768	96.9	5768	96.9	5767	96.9	5764	96.8	5751	96.6	5426	91.2	5620	94.4	5637	94.7	5296	89.0	5466	91.8
<b><u>Cwm Taf LHB</u></b>																					
Merthyr Tydfil LA	693	679	98.0	679	98.0	679	98.0	678	97.8	679	98.0	646	93.2	673	97.1	673	97.1	642	92.6	659	95.1
Rhondda Cynon Taff LA	2759	2720	98.6	2720	98.6	2720	98.6	2720	98.6	2720	98.6	2593	94.0	2705	98.0	2705	98.0	2565	93.0	2643	95.8
<b>Health Board Total</b>	3452	3399	98.5	3399	98.5	3399	98.5	3398	98.4	3399	98.5	3239	93.8	3378	97.9	3378	97.9	3207	92.9	3302	95.7
<b><u>Hywel Dda LHB</u></b>																					
Carmarthenshire LA	1977	1924	97.3	1924	97.3	1924	97.3	1919	97.1	1920	97.1	1838	93.0	1901	96.2	1893	95.8	1800	91.0	1854	93.8
Ceredigion LA	658	634	96.4	634	96.4	634	96.4	634	96.4	633	96.2	604	91.8	620	94.2	619	94.1	609	92.6	616	93.6
Pembrokeshire LA	1285	1230	95.7	1230	95.7	1230	95.7	1229	95.6	1227	95.5	1171	91.1	1207	93.9	1209	94.1	1142	88.9	1170	91.1
<b>Health Board Total</b>	3920	3788	96.6	3788	96.6	3788	96.6	3782	96.5	3780	96.4	3613	92.2	3728	95.1	3721	94.9	3551	90.6	3640	92.9
<b><u>Powys Teaching LHB</u></b>																					
	1263	1212	96.0	1212	96.0	1212	96.0	1212	96.0	1212	96.0	1142	90.4	1197	94.8	1201	95.1	1151	91.1	1182	93.6
Unknown	239	231	96.7	231	96.7	231	96.7	231	96.7	231	96.7	219	91.6	229	95.8	228	95.4	219	91.6	225	94.1
<b>Wales Total</b>	34824	33878	97.3	33877	97.3	33875	97.3	33850	97.2	33818	97.1	32036	92.0	33410	95.9	33429	96.0	31613	90.8	32589	93.6

\* Reflects uptake of the completed primary course in this age group

\*\* Full primary 2 dose course of pneumococcal conjugate vaccine

\*\*\* Third and Final dose of pneumococcal conjugate vaccine

**Table 4.** Vaccine uptake in children reaching their 5th birthday between 01/04/09 and 31/03/10 and resident on 01/05/2010.

Area	Resident children (n)	D3		T3		P3		Po3		Hib3		MenC*		MMR1		MMR2		D4		T4		aP		Po4	
		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<b><u>Abertawe Bro Morgannwg University LHB</u></b>																									
Bridgend LA	1457	1402	96.2	1402	96.2	1401	96.2	1396	95.8	1389	95.3	1394	95.7	1352	92.8	1205	82.7	1263	86.7	1263	86.7	1263	86.7	1263	86.7
Neath Port Talbot LA	1517	1456	96.0	1456	96.0	1456	96.0	1452	95.7	1452	95.7	1450	95.6	1380	91.0	1261	83.1	1333	87.9	1333	87.9	1332	87.8	1334	87.9
Swansea LA	2444	2362	96.6	2361	96.6	2359	96.5	2360	96.6	2348	96.1	2334	95.5	2245	91.9	2066	84.5	2199	90.0	2199	90.0	2198	89.9	2199	90.0
<b>Health Board Total</b>	5418	5220	96.3	5219	96.3	5216	96.3	5208	96.1	5189	95.8	5178	95.6	4977	91.9	4532	83.6	4795	88.5	4795	88.5	4793	88.5	4796	88.5
<b><u>Aneurin Bevan LHB</u></b>																									
Blaenau Gwent LA	734	715	97.4	715	97.4	715	97.4	717	97.7	713	97.1	711	96.9	703	95.8	643	87.6	669	91.1	669	91.1	669	91.1	669	91.1
Caerphilly LA	1975	1928	97.6	1928	97.6	1928	97.6	1925	97.5	1922	97.3	1917	97.1	1865	94.4	1709	86.5	1781	90.2	1781	90.2	1781	90.2	1780	90.1
Monmouthshire LA	912	863	94.6	863	94.6	863	94.6	861	94.4	858	94.1	849	93.1	832	91.2	778	85.3	832	91.2	832	91.2	832	91.2	830	91.0
Newport LA	1771	1699	95.9	1699	95.9	1699	95.9	1697	95.8	1688	95.3	1660	93.7	1656	93.5	1511	85.3	1572	88.8	1572	88.8	1572	88.8	1573	88.8
Torfaen LA	1066	1041	97.7	1041	97.7	1040	97.6	1040	97.6	1036	97.2	1033	96.9	1014	95.1	946	88.7	978	91.7	978	91.7	978	91.7	978	91.7
<b>Health Board Total</b>	6458	6246	96.7	6246	96.7	6245	96.7	6240	96.6	6217	96.3	6170	95.5	6070	94.0	5587	86.5	5832	90.3	5832	90.3	5832	90.3	5830	90.3
<b><u>Betsi Cadwaladr University LHB</u></b>																									
Anglesey LA	671	651	97.0	651	97.0	651	97.0	651	97.0	650	96.9	645	96.1	633	94.3	608	90.6	626	93.3	626	93.3	626	93.3	625	93.1
Conwy LA	1045	1007	96.4	1007	96.4	1007	96.4	1001	95.8	1005	96.2	997	95.4	986	94.4	904	86.5	918	87.8	918	87.8	918	87.8	918	87.8
Denbighshire LA	961	922	95.9	922	95.9	921	95.8	919	95.6	913	95.0	922	95.9	891	92.7	815	84.8	847	88.1	847	88.1	846	88.0	846	88.0
Flintshire LA	1743	1702	97.6	1702	97.6	1702	97.6	1696	97.3	1692	97.1	1686	96.7	1662	95.4	1548	88.8	1596	91.6	1596	91.6	1595	91.5	1596	91.6
Gwynedd LA	1202	1157	96.3	1157	96.3	1157	96.3	1155	96.1	1146	95.3	1137	94.6	1125	93.6	1063	88.4	1124	93.5	1124	93.5	1123	93.4	1124	93.5
Wrexham LA	1533	1488	97.1	1488	97.1	1488	97.1	1483	96.7	1469	95.8	1472	96.0	1471	96.0	1392	90.8	1416	92.4	1416	92.4	1416	92.4	1418	92.5
<b>Health Board Total</b>	7155	6927	96.8	6927	96.8	6926	96.8	6905	96.5	6875	96.1	6859	95.9	6768	94.6	6330	88.5	6527	91.2	6527	91.2	6524	91.2	6527	91.2
<b><u>Cardiff and Vale University LHB</u></b>																									
Cardiff LA	3835	3646	95.1	3646	95.1	3640	94.9	3635	94.8	3588	93.6	3443	89.8	3552	92.6	3143	82.0	3268	85.2	3268	85.2	3266	85.2	3264	85.1
Vale of Glamorgan LA	1367	1323	96.8	1323	96.8	1321	96.6	1319	96.5	1318	96.4	1311	95.9	1280	93.6	1188	86.9	1244	91.0	1244	91.0	1244	91.0	1243	90.9
<b>Health Board Total</b>	5202	4969	95.5	4969	95.5	4961	95.4	4954	95.2	4906	94.3	4754	91.4	4832	92.9	4331	83.3	4512	86.7	4512	86.7	4510	86.7	4507	86.6
<b><u>Cwm Taf LHB</u></b>																									
Merthyr Tydfil LA	654	628	96.0	628	96.0	627	95.9	623	95.3	619	94.6	621	95.0	614	93.9	577	88.2	601	91.9	601	91.9	600	91.7	601	91.9
Rhondda Cynon Taff LA	2633	2577	97.9	2577	97.9	2576	97.8	2572	97.7	2567	97.5	2569	97.6	2485	94.4	2346	89.1	2440	92.7	2440	92.7	2439	92.6	2439	92.6
<b>Health Board Total</b>	3287	3205	97.5	3205	97.5	3203	97.4	3195	97.2	3186	96.9	3190	97.0	3099	94.3	2923	88.9	3041	92.5	3041	92.5	3039	92.5	3040	92.5
<b><u>Hywel Dda LHB</u></b>																									
Cardiganshire LA	1806	1731	95.8	1731	95.8	1730	95.8	1722	95.3	1718	95.1	1711	94.7	1659	91.9	1545	85.5	1644	91.0	1644	91.0	1644	91.0	1644	91.0
Ceredigion LA	618	590	95.5	590	95.5	589	95.3	588	95.1	588	95.1	574	92.9	570	92.2	555	89.8	580	93.9	580	93.9	580	93.9	580	93.9
Pembrokeshire LA	1216	1165	95.8	1165	95.8	1165	95.8	1156	95.1	1155	95.0	1145	94.2	1127	92.7	1007	82.8	1055	86.8	1055	86.8	1055	86.8	1055	86.8
<b>Health Board Total</b>	3640	3486	95.8	3486	95.8	3484	95.7	3466	95.2	3461	95.1	3430	94.2	3356	92.2	3107	85.4	3279	90.1	3279	90.1	3279	90.1	3279	90.1
<b><u>Powys Teaching LHB</u></b>																									
Unknown	1266	1189	93.9	1189	93.9	1189	93.9	1190	94.0	1184	93.5	1176	92.9	1111	87.8	1015	80.2	1121	88.5	1121	88.5	1121	88.5	1120	88.5
Unknown	201	178	88.6	180	89.6	180	89.6	179	89.1	176	87.6	173	86.1	171	85.1	162	80.6	171	85.1	171	85.1	171	85.1	171	85.1
<b>Wales Total</b>	32627	31420	96.3	31421	96.3	31404	96.3	31337	96.0	31194	95.6	30930	94.8	30384	93.1	27987	85.8	29278	89.7	29278	89.7	29269	89.7	29270	89.7

\* Refers to full completed courses of MenC (before the 2006 schedule change)

**Table 5.** Vaccine uptake in children reaching their 15th birthday between 01/04/09 and 31/03/10 and resident on 01/05/2010 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		MMR1		MMR2		Teenage 3 in 1		Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	
<b>Abertawe Bro Morgannwg University LHB</b>																				
Bridgend LA	1570	1414	90.1	1285	81.8	646	41.1	763	683	89.5	633	83.0	805	731	90.8	652	81.0			
Neath Port Talbot LA	1647	1551	94.2	1399	84.9	613	37.2	782	734	93.9	670	85.7	865	817	94.5	729	84.3			
Swansea LA	2604	2411	92.6	2093	80.4	1147	44.0	1305	1214	93.0	1060	81.2	1299	1197	92.1	1033	79.5			
<b>Health Board Total</b>	<b>5821</b>	<b>5376</b>	<b>92.4</b>	<b>4777</b>	<b>82.1</b>	<b>2406</b>	<b>41.3</b>	<b>2850</b>	<b>2631</b>	<b>92.3</b>	<b>2363</b>	<b>82.9</b>	<b>2969</b>	<b>2745</b>	<b>92.5</b>	<b>2414</b>	<b>81.3</b>			
<b>Aneurin Bevan LHB</b>																				
Blaenau Gwent LA	856	802	93.7	748	87.4	14	1.6	423	393	92.9	367	86.8	433	409	94.5	381	88.0			
Caerphilly LA	2147	1949	90.8	1745	81.3	134	6.2	1066	950	89.1	845	79.3	1080	999	92.5	900	83.3			
Monmouthshire LA	1201	1012	84.3	885	73.7	242	20.1	567	474	83.6	414	73.0	634	538	84.9	471	74.3			
Newport LA	1946	1723	88.5	1549	79.6	133	6.8	969	842	86.9	768	79.3	976	880	90.2	780	79.9			
Torfaen LA	1268	1207	95.2	1119	88.2	74	5.8	644	611	94.9	568	88.2	623	595	95.5	551	88.4			
<b>Health Board Total</b>	<b>7418</b>	<b>6693</b>	<b>90.2</b>	<b>6046</b>	<b>81.5</b>	<b>597</b>	<b>8.0</b>	<b>3669</b>	<b>3270</b>	<b>89.1</b>	<b>2962</b>	<b>80.7</b>	<b>3746</b>	<b>3421</b>	<b>91.3</b>	<b>3083</b>	<b>82.3</b>			
<b>Betsi Cadwaladr University LHB</b>																				
Anglesey LA	827	774	93.6	692	83.7	307	37.1	389	362	93.1	329	84.6	438	412	94.1	363	82.9			
Conwy LA	1267	1164	91.9	1050	82.9	582	45.9	612	571	93.3	525	85.8	653	592	90.7	524	80.2			
Denbighshire LA	1128	1041	92.3	942	83.5	506	44.9	570	520	91.2	471	82.6	558	521	93.4	471	84.4			
Flintshire LA	1843	1751	95.0	1576	85.5	635	34.5	918	867	94.4	772	84.1	925	884	95.6	804	86.9			
Gwynedd LA	1373	1292	94.1	1186	86.4	527	38.4	707	662	93.6	613	86.7	666	630	94.6	573	86.0			
Wrexham LA	1457	1393	95.6	1277	87.6	626	43.0	686	658	95.9	603	87.9	771	735	95.3	674	87.4			
<b>Health Board Total</b>	<b>7895</b>	<b>7415</b>	<b>93.9</b>	<b>6723</b>	<b>85.2</b>	<b>3183</b>	<b>40.3</b>	<b>3882</b>	<b>3640</b>	<b>93.8</b>	<b>3313</b>	<b>85.3</b>	<b>4011</b>	<b>3774</b>	<b>94.1</b>	<b>3409</b>	<b>85.0</b>			
<b>Cardiff and Vale University LHB</b>																				
Cardiff LA	4137	3666	88.6	3261	78.8	2627	63.5	2044	1822	89.1	1645	80.5	2092	1844	88.1	1616	77.2			
Vale of Glamorgan LA	1677	1533	91.4	1407	83.9	1245	74.2	825	742	89.9	684	82.9	852	791	92.8	723	84.9			
<b>Health Board Total</b>	<b>5814</b>	<b>5199</b>	<b>89.4</b>	<b>4668</b>	<b>80.3</b>	<b>3872</b>	<b>66.6</b>	<b>2869</b>	<b>2564</b>	<b>89.4</b>	<b>2329</b>	<b>81.2</b>	<b>2944</b>	<b>2635</b>	<b>89.5</b>	<b>2339</b>	<b>79.4</b>			
<b>Cwm Taf LHB</b>																				
Merthyr Tydfil LA	724	669	92.4	613	84.7	285	39.4	351	323	92.0	303	86.3	373	346	92.8	310	83.1			
Rhondda Cynon Taff LA	2744	2604	94.9	2407	87.7	897	32.7	1319	1237	93.8	1141	86.5	1425	1367	95.9	1266	88.8			
<b>Health Board Total</b>	<b>3468</b>	<b>3273</b>	<b>94.4</b>	<b>3020</b>	<b>87.1</b>	<b>1182</b>	<b>34.1</b>	<b>1670</b>	<b>1560</b>	<b>93.4</b>	<b>1444</b>	<b>86.5</b>	<b>1798</b>	<b>1713</b>	<b>95.3</b>	<b>1576</b>	<b>87.7</b>			
<b>Hywel Dda LHB</b>																				
Carmarthenshire LA	2016	1788	88.7	1571	77.9	1045	51.8	993	889	89.5	787	79.3	1023	899	87.9	784	76.6			
Ceredigion LA	725	668	92.1	593	81.8	277	38.2	342	312	91.2	281	82.2	383	356	93.0	312	81.5			
Pembrokeshire LA	1433	1279	89.3	1148	80.1	222	15.5	744	656	88.2	591	79.4	689	623	90.4	557	80.8			
<b>Health Board Total</b>	<b>4174</b>	<b>3735</b>	<b>89.5</b>	<b>3312</b>	<b>79.3</b>	<b>1544</b>	<b>37.0</b>	<b>2079</b>	<b>1857</b>	<b>89.3</b>	<b>1659</b>	<b>79.8</b>	<b>2095</b>	<b>1878</b>	<b>89.6</b>	<b>1653</b>	<b>78.9</b>			
<b>Powys Teaching LHB</b>																				
	1488	1333	89.6	1180	79.3	661	44.4	730	656	89.9	581	79.6	758	677	89.3	599	79.0			
Unknown	423	275	65.0	209	49.4	89	21.0	215	131	60.9	102	47.4	207	144	69.6	107	51.7			
<b>Wales Total</b>	<b>36501</b>	<b>33299</b>	<b>91.2</b>	<b>29935</b>	<b>82.0</b>	<b>13534</b>	<b>37.1</b>	<b>17964</b>	<b>16309</b>	<b>90.8</b>	<b>14753</b>	<b>82.1</b>	<b>18528</b>	<b>16987</b>	<b>91.7</b>	<b>15180</b>	<b>81.9</b>			

\* Teenage booster doses of diphtheria, tetanus and polio immunisations

**Table 6.** Vaccine uptake in children reaching their 16th birthday between 01/04/09 and 31/03/10 and resident on 01/05/2010 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster*		Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	
<b><u>Abertawe Bro Morgannwg University LHB</u></b>																				
Bridgend LA	1559	1437	92.2	1296	83.1	1187	76.1	766	702	91.6	634	82.8	790	734	92.9	662	83.8			
Neath Port Talbot LA	1751	1656	94.6	1533	87.5	1362	77.8	809	771	95.3	713	88.1	942	885	93.9	820	87.0			
Swansea LA	2700	2541	94.1	2288	84.7	2162	80.1	1278	1203	94.1	1096	85.8	1422	1338	94.1	1192	83.8			
<b>Health Board Total</b>	6010	5634	93.7	5117	85.1	4711	78.4	2853	2676	93.8	2443	85.6	3154	2957	93.8	2674	84.8			
<b><u>Aneurin Bevan LHB</u></b>																				
Blaenau Gwent LA	955	916	95.9	853	89.3	51	5.3	482	463	96.1	431	89.4	473	453	95.8	422	89.2			
Caerphilly LA	2229	2076	93.1	1851	83.0	197	8.8	1130	1040	92.0	932	82.5	1099	1036	94.3	919	83.6			
Monmouthshire LA	1186	996	84.0	830	70.0	498	42.0	586	480	81.9	407	69.5	600	516	86.0	423	70.5			
Newport LA	1984	1810	91.2	1607	81.0	338	17.0	967	878	90.8	780	80.7	1014	932	91.9	827	81.6			
Torfaen LA	1292	1229	95.1	1120	86.7	190	14.7	643	612	95.2	557	86.6	646	614	95.0	561	86.8			
<b>Health Board Total</b>	7646	7027	91.9	6261	81.9	1274	16.7	3808	3473	91.2	3107	81.6	3832	3551	92.7	3152	82.3			
<b><u>Betsi Cadwaladr University LHB</u></b>																				
Anglesey LA	842	795	94.4	738	87.6	608	72.2	375	348	92.8	327	87.2	467	447	95.7	411	88.0			
Conwy LA	1312	1215	92.6	1085	82.7	1039	79.2	659	615	93.3	548	83.2	652	599	91.9	537	82.4			
Denbighshire LA	1214	1126	92.8	1021	84.1	957	78.8	611	572	93.6	523	85.6	602	553	91.9	497	82.6			
Flintshire LA	1860	1787	96.1	1661	89.3	1388	74.6	908	861	94.8	808	89.0	952	926	97.3	853	89.6			
Gwynedd LA	1378	1309	95.0	1247	90.5	1049	76.1	678	644	95.0	618	91.2	700	665	95.0	629	89.9			
Wrexham LA	1470	1413	96.1	1338	91.0	1190	81.0	717	696	97.1	659	91.9	753	717	95.2	679	90.2			
<b>Health Board Total</b>	8076	7645	94.7	7090	87.8	6231	77.2	3948	3736	94.6	3483	88.2	4126	3907	94.7	3606	87.4			
<b><u>Cardiff and Vale University LHB</u></b>																				
Cardiff LA	4268	3848	90.2	3500	82.0	2769	64.9	2009	1827	90.9	1672	83.2	2259	2021	89.5	1828	80.9			
Vale of Glamorgan LA	1734	1603	92.4	1476	85.1	1287	74.2	830	766	92.3	701	84.5	904	837	92.6	775	85.7			
<b>Health Board Total</b>	6002	5451	90.8	4976	82.9	4056	67.6	2839	2593	91.3	2373	83.6	3163	2858	90.4	2603	82.3			
<b><u>Cwm Taf LHB</u></b>																				
Merthyr Tydfil LA	783	737	94.1	699	89.3	635	81.1	355	335	94.4	315	88.7	428	402	93.9	384	89.7			
Rhondda Cynon Taff LA	2825	2703	95.7	2518	89.1	2167	76.7	1396	1327	95.1	1240	88.8	1429	1376	96.3	1278	89.4			
<b>Health Board Total</b>	3608	3440	95.3	3217	89.2	2802	77.7	1751	1662	94.9	1555	88.8	1857	1778	95.7	1662	89.5			
<b><u>Hywel Dda LHB</u></b>																				
Carmarthenshire LA	2040	1856	91.0	1659	81.3	1492	73.1	1003	898	89.5	815	81.3	1037	958	92.4	844	81.4			
Ceredigion LA	756	708	93.7	650	86.0	587	77.6	379	356	93.9	326	86.0	377	352	93.4	324	85.9			
Pembrokeshire LA	1521	1384	91.0	1245	81.9	419	27.5	774	708	91.5	639	82.6	747	676	90.5	606	81.1			
<b>Health Board Total</b>	4317	3948	91.5	3554	82.3	2498	57.9	2156	1962	91.0	1780	82.6	2161	1986	91.9	1774	82.1			
<b><u>Powys Teaching LHB</u></b>																				
	1603	1468	91.6	1323	82.5	1268	79.1	794	738	92.9	659	83.0	809	730	90.2	664	82.1			
Unknown	444	283	63.7	229	51.6	199	44.8	222	133	59.9	113	50.9	220	150	68.2	116	52.7			
<b>Wales Total</b>	37706	34896	92.5	31767	84.2	23039	61.1	18371	16973	92.4	15513	84.4	19322	17917	92.7	16251	84.1			

\* Teenage booster doses of diphtheria, tetanus and polio immunisations

**Table 7.** HPV Vaccine uptake in girls reaching their 14th and 19th birthdays between 01/09/2009 and 31/08/2010 and resident on 01/05/2010.

Area	Girls reaching 14th birthday*							Girls reaching 19th birthday**						
	Resident girls	1 dose		2 doses		3 doses		Resident girls	1 dose		2 doses		3 doses	
	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<b>Abertawe Bro Morgannwg University LHB</b>														
Bridgend LA	736	642	87.2	640	87.0	624	84.8	838	238	28.4	183	21.8	111	13.2
Neath Port Talbot LA	783	723	92.3	715	91.3	709	90.5	864	405	46.9	374	43.3	270	31.3
Swansea LA	1268	1175	92.7	1172	92.4	1148	90.5	1409	603	42.8	538	38.2	400	28.4
<b>Health Board Total</b>	<b>2787</b>	<b>2540</b>	<b>91.1</b>	<b>2527</b>	<b>90.7</b>	<b>2481</b>	<b>89.0</b>	<b>3111</b>	<b>1246</b>	<b>40.1</b>	<b>1095</b>	<b>35.2</b>	<b>781</b>	<b>25.1</b>
<b>Aneurin Bevan LHB</b>														
Blaenau Gwent LA	406	391	96.3	389	95.8	378	93.1	469	119	25.4	110	23.5	82	17.5
Caerphilly LA	1039	956	92.0	948	91.2	929	89.4	1129	416	36.8	365	32.3	266	23.6
Monmouthshire LA	515	415	80.6	412	80.0	326	63.3	576	260	45.1	232	40.3	166	28.8
Newport LA	908	770	84.8	753	82.9	709	78.1	1097	477	43.5	447	40.7	295	26.9
Torfaen LA	550	520	94.5	520	94.5	510	92.7	612	382	62.4	354	57.8	258	42.2
<b>Health Board Total</b>	<b>3418</b>	<b>3052</b>	<b>89.3</b>	<b>3022</b>	<b>88.4</b>	<b>2852</b>	<b>83.4</b>	<b>3883</b>	<b>1654</b>	<b>42.6</b>	<b>1508</b>	<b>38.8</b>	<b>1067</b>	<b>27.5</b>
<b>Betsi Cadwaladr University LHB</b>														
Anglesey LA	378	336	88.9	334	88.4	324	85.7	430	298	69.3	238	55.3	156	36.3
Conwy LA	592	519	87.7	518	87.5	501	84.6	648	312	48.1	286	44.1	202	31.2
Denbighshire LA	503	452	89.9	447	88.9	429	85.3	651	396	60.8	360	55.3	274	42.1
Flintshire LA	880	826	93.9	824	93.6	804	91.4	991	593	59.8	519	52.4	401	40.5
Gwynedd LA	633	548	86.6	544	85.9	531	83.9	726	422	58.1	368	50.7	328	45.2
Wrexham LA	730	649	88.9	643	88.1	633	86.7	816	470	57.6	394	48.3	282	34.6
<b>Health Board Total</b>	<b>3716</b>	<b>3330</b>	<b>89.6</b>	<b>3310</b>	<b>89.1</b>	<b>3222</b>	<b>86.7</b>	<b>4262</b>	<b>2491</b>	<b>58.4</b>	<b>2165</b>	<b>50.8</b>	<b>1643</b>	<b>38.5</b>
<b>Cardiff and Vale University LHB</b>														
Cardiff LA	1963	1646	83.9	1617	82.4	1542	78.6	2125	882	41.5	763	35.9	524	24.7
Vale of Glamorgan LA	777	695	89.4	691	88.9	656	84.4	850	362	42.6	240	28.2	159	18.7
<b>Health Board Total</b>	<b>2740</b>	<b>2341</b>	<b>85.4</b>	<b>2308</b>	<b>84.2</b>	<b>2198</b>	<b>80.2</b>	<b>2975</b>	<b>1244</b>	<b>41.8</b>	<b>1003</b>	<b>33.7</b>	<b>683</b>	<b>23.0</b>
<b>Cwm Taf LHB</b>														
Merthyr Tydfil LA	366	348	95.1	347	94.8	340	92.9	309	95	30.7	81	26.2	45	14.6
Rhondda Cynon Taff LA	1287	1195	92.9	1188	92.3	1177	91.5	1552	694	44.7	595	38.3	354	22.8
<b>Health Board Total</b>	<b>1653</b>	<b>1543</b>	<b>93.3</b>	<b>1535</b>	<b>92.9</b>	<b>1517</b>	<b>91.8</b>	<b>1861</b>	<b>789</b>	<b>42.4</b>	<b>676</b>	<b>36.3</b>	<b>399</b>	<b>21.4</b>
<b>Hywel Dda LHB</b>														
Carmarthenshire LA	985	887	90.1	883	89.6	858	87.1	891	678	76.1	618	69.4	522	58.6
Ceredigion LA	321	271	84.4	271	84.4	264	82.2	419	220	52.5	194	46.3	126	30.1
Pembrokeshire LA	673	585	86.9	581	86.3	568	84.4	799	346	43.3	304	38.0	195	24.4
<b>Health Board Total</b>	<b>1979</b>	<b>1743</b>	<b>88.1</b>	<b>1735</b>	<b>87.7</b>	<b>1690</b>	<b>85.4</b>	<b>2109</b>	<b>1244</b>	<b>59.0</b>	<b>1116</b>	<b>52.9</b>	<b>843</b>	<b>40.0</b>
<b>Powys Teaching LHB</b>														
	<b>697</b>	<b>595</b>	<b>85.4</b>	<b>592</b>	<b>84.9</b>	<b>580</b>	<b>83.2</b>	<b>779</b>	<b>483</b>	<b>62.0</b>	<b>452</b>	<b>58.0</b>	<b>365</b>	<b>46.9</b>
Unknown	168	101	60.1	100	59.5	96	57.1	367	88	24.0	82	22.3	58	15.8
<b>Wales Total</b>	<b>17158</b>	<b>15245</b>	<b>88.9</b>	<b>15129</b>	<b>88.2</b>	<b>14636</b>	<b>85.3</b>	<b>19347</b>	<b>9239</b>	<b>47.8</b>	<b>8097</b>	<b>41.9</b>	<b>5839</b>	<b>30.2</b>

\* 2008-2009 routine year 8 group

\*\* 2008-2009 Catch up group

## Links

HPV catch-up for young women born between 1 September 1990 and 31 August 1991:  
<http://wales.gov.uk/topics/health/publications/health/ministerial/hpvvaccination/?lang=en>

Welsh Health Circular (2005) 081 – MMR immunisation catch-up:  
[http://www.wales.nhs.uk/documents/WHC\\_2005\\_081.pdf](http://www.wales.nhs.uk/documents/WHC_2005_081.pdf)

Accelerated HPV catch-up for young women born between 1 September 1991 and 31 August 1995 (intranet): <http://howis.wales.nhs.uk/sites3/page.cfm?orgid=474&pid=21255>

Public Health Wales Vaccination and Immunisation intranet site HPV pages:  
<http://howis.wales.nhs.uk/sites3/page.cfm?orgid=474&pid=21297>

Link to guidance on follow up of children who have missed scheduled MMR doses (WHC (2005)81):  
[http://www.wales.nhs.uk/documents/WHC\\_2005\\_081.pdf](http://www.wales.nhs.uk/documents/WHC_2005_081.pdf)

Public Health Wales Vaccination and Immunisation intranet (NHS Wales only):  
<http://howis.wales.nhs.uk/sites3/home.cfm?orgid=474>

Public Health Wales Health Protection internet:  
<http://www.wales.nhs.uk/sites3/home.cfm?orgid=457>